

CLAIMS

What is claimed is:

1. In a system of the type comprising an enterprise network that provides
5 connectivity between a plurality of enterprise telephone stations, wherein a landline connection
extends between the enterprise network and a packet-switched network, and wherein a call server
sits on the packet-switched network and engages in packet-based signaling with the enterprise
network to set up calls inside the enterprise network between the enterprise telephone stations, a
method comprising:

10 detecting failure of the landline connection; and

in response to detecting failure of the landline connection, invoking a wireless wide area
network (WWAN) connection between the enterprise network and the packet-switched network
to allow continued passage of the packet-based signaling between the enterprise network and the
call server to set up calls inside the enterprise network between the enterprise telephone stations.

15 2. The method of claim 1, wherein the WWAN connection comprises a cellular
radiocommunication system.

3. The method of claim 1, wherein invoking the WWAN connection comprises
20 using a WWAN modem to acquire connectivity with the packet-switched network.

4. The method of claim 1, wherein the enterprise network includes a router that routes the packet-based signaling to the packet-switched network, and wherein detecting the failure comprises the router detecting the failure.

5 5. The method of claim 1, wherein the enterprise network includes a router that has a first mode in which the router routes traffic over the landline connection and a second mode in which the router routes traffic over the WWAN connection, and wherein invoking the WWAN connection comprises the router switching from the first mode to the second mode.

10 6. The method of claim 5, wherein the router is coupled with a WWAN modem, and wherein invoking the WWAN connection comprises the router sending data to the WWAN modem.

15 7. The method of claim 1, wherein the call server comprises an IP Centrex server.

8. The method of claim 1, wherein the packet-based signaling comprises Session Initiation Protocol (SIP) signaling.

20 9. The method of claim 1, further comprising:
using the WWAN connection to carry emergency calls between the enterprise network and the packet-switched network.

10. The method of claim 1, further comprising:

restricting outside calling via the WWAN connection.

11. The method of claim 10, wherein restricting outside calling via the WWAN connection comprises:

5 allowing emergency service calls via the WWAN connection but precluding other outside calls via the WWAN connection.

12. In a system of the type comprising an enterprise network that provides connectivity between a plurality of enterprise telephone stations, wherein the enterprise network
10 is coupled by a landline connection with a packet-switched network and a call server on the packet-switched network engages in packet-based signaling with the enterprise network to set up calls inside the enterprise network between the enterprise telephone stations, the improvement comprising:

a wireless wide area network (WWAN) modem for providing a WWAN backup link
15 between the enterprise network and the packet-switched network; and

routing logic, operable upon failure of the landline connection, to route the packet-based signaling via the WWAN backup link between the enterprise network and the packet-switched network, so as to allow continued setup of calls inside the enterprise network between the enterprise telephone stations.

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13. The improvement of claim 12, wherein the enterprise network comprises a router having the routing logic, wherein the routing logic defines a primary static route via the landline connection and a secondary static route via the WWAN modem.

14. The improvement of claim 13, wherein the routing logic defines the primary static route as a lower cost route than the secondary static route, so that (i) the router normally uses the primary static route and (ii) the router uses the secondary static route when the primary static route becomes unavailable.

15. The improvement of claim 12, wherein the WWAN modem establishes the WWAN backup link via a cellular radiocommunication system.

16. The improvement of claim 12, wherein the WWAN modem is integrated within the router.

17. The improvement of claim 12, wherein the call server comprises an IP Centrex server.

18. The improvement of claim 12, wherein the packet-based signaling comprises Session Initiation Protocol (SIP) signaling.

19. The improvement of claim 12, further comprising:
call-server-logic for restricting outside calling via the WWAN backup link.

20. The improvement of claim 19, wherein the call-server-logic allows emergency service calls via the WWAN backup link but precludes other outside calls via the WWAN backup link.